

WHAT IS CLAIMED IS:

1. A medical device or implant comprising a body having at least one surface coated with, or including a peptide having at least 9 amino acid residues and less than 51 amino acid residues, said peptide including an amino acid sequence selected from the group consisting of SEQ ID NOs: 1-5.
2. The medical device or implant of claim 1, wherein said peptide is amidated.
3. The medical device or implant of claim 1, wherein said at least one surface is coated with said peptide at a surface density selected from a range of 0.4 to 275 micrograms per square centimeter.
4. The medical device or implant of claim 1, wherein said at least one surface is composed of a synthetic carbon polymer and/or a polypeptide.
5. The medical device or implant of claim 1, wherein the medical device or implant is a vascular graft.
6. The medical device or implant of claim 1, wherein said at least one surface is also coated with or also includes an antibiotic.
7. The medical device or implant of claim 6, wherein said antibiotic is rifampin.
8. A method of fabricating a medical device or implant capable of killing, or preventing a growth of, a microbial pathogen, the method comprising contacting at least one surface of a body of the medical device or implant with a peptide having at least 9 amino acid residues and less than 51 amino acid residues, said peptide including an amino acid sequence selected from the group consisting of SEQ ID NOs: 1-5, thereby rendering the surface of the medical implant capable of killing, or preventing the growth of, the microbial pathogen.

9. The method of claim 8, wherein said contacting said at least one surface of the medical device or implant with said peptide is effected by exposing said at least one surface of the medical device or implant with a solution of said peptide, wherein the concentration of said peptide in said solution is selected from a range of 1 to 500 micrograms per milliliter.

10. The method of claim 9, wherein said exposing said at least one surface of the medical device or implant with said solution of said peptide is effected for a duration selected from a range of 0.05 to 50 hours.

11. The method of claim 9, wherein said solution further comprises an antibiotic.

12. The method of claim 11, wherein said antibiotic is rifampin.

13. The method of claim 11, wherein a concentration of said antibiotic in said solution is selected from a range of 0.5 to 50 micrograms per milliliter.

14. The method of claim 8, wherein said at least one surface is composed of a synthetic carbon polymer and/or a polypeptide.

15. The method of claim 8, wherein the medical device or implant is a vascular graft.

16. The method of claim 8, wherein said peptide is amidated.

17. A method of preventing microbial infection in a subject in need of implantation of a medical implant, the method comprising administering to the subject a medical implant comprising a body having at least one surface, said at least one surface being coated with, or including a peptide having at least 9 amino acid residues and less than 51 amino acid residues, said peptide including an amino acid sequence selected from the group consisting of SEQ ID NOs: 1-5, thereby treating the subject in need thereof with the medical implant.

18. The method of claim 17, wherein said at least one surface is coated with said peptide at a surface density selected from a range of 0.4 to 275 micrograms per square centimeter.

19. The method of claim 17, wherein said at least one surface is composed of a synthetic carbon polymer and/or a polypeptide.

20. The method of claim 17, wherein said peptide is amidated.

21. The method of claim 17, wherein the medical implant is a vascular graft.

22. The method of claim 17, wherein said at least one surface is also coated with or also includes an antibiotic.

23. The method of claim 22, wherein said antibiotic is rifampin.